IN THE SPECIFICATION

Before paragraph [0001] of the specification, insert the new heading and paragraph shown below:

--CROSS-REFERENCE TO RELATED APPLICATIONS

[0001a] This application claims the benefit of U.S. provisional application No. 60/425,282, filed November 12, 2002, and U.S. provisional application No. 60/429,351, filed November 27, 2002.--

Replace present paragraph [0009] with the following new paragraph [0009]:

[0009] Non-steady-state flow leading to delayed stall has been studied. The rotating blades of a helicopter in forward flight experience cyclical variations in angle of attack that can lead to operation in the delayed stall regime for some of the blade travel. For that reason, The Boeing Company, in the course of its helicopter design efforts, has developed and published algorithms for analyzing delayed stall (usually called "dynamic stall" when referring to helicopter rotor blades). Harris et al., "Rotor High Speed Performance, Theory vs. Test," J. of Amer. Helicopter Soc., Vol. 15, No. 3, April 1970, pp. 35-44; Tarzanin, "Prediction of Control Loads Due to Blade Stall," J. of Amer. Helicopter Soc., Vol. 17, No. 2, April 1972, pp. 33-46. In particular, a formulation of the Boeing dynamic stall model by Wayne Johnson has proven especially useful for that purpose. Johnson, "Rotorcraft Aerodynamics Models for a Comprehensive Analysis," Proc. Amer. Helicopter Soc. 54th Annual Forum, Washington, DC, May 20-22, 9998, pp. 71-93 [94]; Nguyen and Johnson,

"Evaluation of Dynamic Stall Models with UH-60A Airloads Flight Test Data," Proc. Amer. Helicopter Soc. 54th Annual Forum, Washington, DC, May 20-22, 1998, pp. 576-88.

Replace present paragraph [0058] with the following new paragraph [0058]:

[0058] The present invention can also achieve noise reductions in rotating propulsion devices, which is particularly advantageous in marine applications such as ship or torpedo propellers, as well as in aeronautical applications. It is known that the sound radiated [irradiated] by rotating machinery increases as the 4^{th}, 5^{th}, or 6^{th} power of the angular velocity of its rotational components, depending on the type of sound source. For marine applications, particularly for the military, the noise generated by rotating machinery is of particular interest. Not only does a rotating device (such as a propulsor) radiate sound, but the metal body to which it is attached (a submarine, torpedo, or surface vessel) acts as an even larger sound source. The present invention, because it increases the energy transferred between the propulsor and the working medium at a given angular velocity, can provide the same thrust at a lower angular velocity. In addition, with the thrust increases available using the present invention, a propeller with a smaller diameter can produce the same amount of thrust, thus lessening the propulsor volume required for a given vessel.